UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,620	07/01/2004	Jigang Liu	CN 020002	4330

24737 7590 06/05/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
NGUYEN, TUAN HOANG	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/500,620	LIU, JIGANG	
	Examiner	Art Unit	
	Tuan H. Nguyen	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-14* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response To Arguments

1. Applicant's arguments, see applicant's remarks, filed on 03/21/2006, with respect to the rejection(s) of claims 1-4 and 6-14 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gardner (US PAT. 6,466,803) and further in view Westergren et al. (US PAT. 5,423,076 hereinafter, "Westergren").

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner (US PAT. 6,466,803) in view Westergren et al. (US PAT. 5,423,076 hereinafter, "Westergren").

Consider claim 1, Gardner teaches transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44) and comprising a single digital synthesizer (item 62) driven phase locked loop (item 60) (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that the characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that digital synthesizer driven phase locked loop (items 38 and 57), in transmitting mode, is in a modulating state (col. 8 lines 18-21), with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state (Fig. 1 and Fig. 3, col. 4 lines 12-66 and col. 10 lines 38-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 2, Westergren further teaches characterized in that digital synthesizer (item 58) driven phase locked loop (items 57) receives, in modulating state, a modulation signal (col. 10 line 38 through col. 11 line 2), with digital synthesizer driven

phase locked loop (items 38 and 57), in oscillating state, receiving a non-modulation signal (Fig. 1 and Fig. 3 col. 2 lines 34-45).

Consider claim 3, Westergren further teaches characterized in that transceiver (item 10) comprises a controller (item 59) for generating modulation signal and for generating control signals, with a switch (item 139) being coupled to controller and digital synthesizer driven phase locked loop (items 38 and 57) for in response to a first control signal supplying modulation signal from controller to digital synthesizer driven phase locked loop (items 38 and 57) and in response to a second control signal supplying non-modulation signal to digital synthesizer driven phase locked loop (items 38 and 57 col. 6 lines 35-50).

Consider claim 4, Gardner further teaches characterized in that digital synthesizer driven phase locked loop comprises, in modulating state, a first filtering performance, with digital synthesizer driven phase locked loop comprising, in oscillating state, a second filtering performance different from first filtering performance (see fig. 3 col. 9 lines 16-31).

Consider claim 6, Westergren further teaches characterized in that digital synthesizer driven phase locked loop (items 38 and 57), in modulating state, generates a modulated signal (col. 10 line 38 through col. 11 line 2), with digital synthesizer driven phase locked loop (items 38 and 57), in oscillating state, generating a non-modulated

signal (col. 2 lines 34-45).

Consider claim 7, Westergren further teaches characterized in that an output of digital synthesizer driven phase locked loop (items 57) is coupled via a first switch (item 132) and a transmitter part and a second switch (item 139) to an antenna (item 14) for in response to a first control signal supplying modulated signal to antenna for transmitting modulated signal, with first switch further being coupled to a first input of a demodulator and with second switch further being coupled via a receiver part to a second input of demodulator for in response to a second control signal supplying non-modulated signal to demodulator for demodulating a radio signal received via antenna (Fig. 1 and Fig. 3 col. 9 lines 6-34).

Consider claim 8, Gardner teaches a single digital synthesizer (item 62) driven phase locked loop (item 60) for use in a transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44) and comprising digital synthesizer driven phase locked loop (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that synthesizer driven phase locked loop, in transmitting mode, is in a modulating state (col. 4 lines 24-30), with digital synthesizer driven phase locked loop, in receiving mode,

being in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 9, Gardner teaches phase locked loop (item 60) for use in a single digital synthesizer (item 62) driven phase locked loop for use in a transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44), and comprising digital synthesizer driven phase locked loop (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that phase locked loop, in transmitting mode, is in a modulating state, with phase locked loop, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that phase locked loop, in transmitting mode, is in a modulating state (col. 4 lines 24-30), with phase locked loop, in receiving mode, being in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that phase locked loop, in transmitting mode, is in a modulating state, with phase locked

loop, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 10, Gardner teaches a single digital synthesizer (item 62) for use in a single digital synthesizer driven phase locked loop (item 60) for use in a transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44), and comprising digital synthesizer driven phase locked loop (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that digital synthesizer, in transmitting mode, is in a modulating state, with digital synthesizer, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that digital synthesizer, in transmitting mode, is in a modulating state (col. 4 lines 24-30), with digital synthesizer, in receiving mode, being in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that digital synthesizer, in transmitting mode, is in a modulating state, with digital synthesizer, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 11, Gardner teaches system comprising at least one portable unit (see fig. 1 item 10) and at least one network unit for radio communication, with at least one unit comprising at least one transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44), and comprising a single digital synthesizer driven phase locked loop (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state (col. 4 lines 24-30), with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 12, Gardner teaches portable unit (see fig. 1 item 10) comprising a transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44), and comprising a single digital synthesizer (item 62) driven phase locked loop (item 60) (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state (col. 4 lines 24-30), with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 13, Gardner teaches network unit comprising at least one transceiver for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44), and comprising a single digital synthesizer (item 62) driven phase locked loop (item 60) (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state (col. 4 lines 24-30), with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase locked loop, in receiving mode, being in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Consider claim 14, Gardner teaches for transmitting signals in a transmitting mode (item 48) and for receiving signals in a receiving mode (item 44) via a single digital synthesizer (item 62) driven phase locked loop (item 60) (see fig. 3 col. 9 lines 16-31).

Gardner does not explicitly show that characterized in that method comprises a first step of bringing digital synthesizer driven phase locked loop, in transmitting mode, in a modulating state, and a second step of bringing digital synthesizer driven phase locked loop, in receiving mode, in an oscillating state.

In the same field of endeavor, Westergren teaches characterized in that method comprises a first step of bringing digital synthesizer driven phase locked loop, in transmitting mode, in a modulating state (col. 4 lines 24-30), and a second step of bringing digital synthesizer driven phase locked loop, in receiving mode, in an oscillating state (col. 10 lines 38-43 and Fig. 1 and Fig. 3 col. 4 lines 12-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, characterized in that method comprises a first step of bringing digital synthesizer driven phase locked loop, in transmitting mode, in a modulating state, and a second step of bringing digital synthesizer driven phase locked loop, in receiving mode, in an oscillating state, as taught by Westergren, in order to provide both the digital CDMA and analog AMPS standards in one wireless phone expands effective user coverage area.

Allowable Subject Matter

4. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 5, Gardner teaches transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising a single digital synthesizer driven phase locked loop.

Westergren teaches characterized in that digital synthesizer driven phase locked loop, in transmitting mode, is in a modulating state, with digital synthesizer driven phase

locked loop, in receiving mode, being in an oscillating state. However, the prior art made of record, alone or in combination, fails to clearly teach or fairly suggest specified in the dependent claim, in combination with other limitations, as specified in the independent claim 1.

Conclusion

5. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen
Examiner
Art Unit 2618

QUOCHIEN B. VUONG
PRIMARY EXAMINER